

Assoc. Prof. ŞAHİN IŞIK

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: H-5373-2018

ScopusID: 56247318100

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Education Information

Doctorate, Anadolu University, Institute Of Science, Bilgisayar Bilimleri (Dr), Turkey 2014 - 2018

Dissertations

Doctorate, New approaches to improve performance of background subtraction, Anadolu University, Fen Bilimleri Enstitüsü, Bilgisayar Bilimleri (Dr), 2018

Postgraduate, Öznitelik tabanlı imge çıkıştırma, Anadolu University, Fen Bilimleri Enstitüsü, Bilgisayar Yazılımı (YI) (Tezli), 2014

Research Areas

Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Knowledge Engineering, Computer Learning, Human Computer Interaction, Text/Document Processing, Pattern Recognition and Image Processing, Neural Networks, Software Engineering, Soft Computing, Biomedical Image Processing, Biomedical Image Processing, Biosignal Processing, Biosignal Processing

Academic Titles / Tasks

Associate Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ, 2021 - Continues

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ, 2019 - 2021

Research Assistant, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ, 2017 - 2019

Research Assistant, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fen Bil.Enst.Md.Lüğü, 2012 - 2017

Academic and Administrative Experience

Head of Department, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ, 2023 - Continues

Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ, 2022 - 2022

Courses

Undergraduate

PATTERN RECOGNITION, Undergraduate, 2022 - 2023, 2021 - 2022

INTRODUCTION TO DEEP LEARNING, Undergraduate, 2017 - 2018

NUMERICAL METHODS, Undergraduate, 2017 - 2018

WEB BASED TECHNOLOGIES, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Ultra-high dilutions analysis: Exploring the effects of potentization by electron microscopy, Raman spectroscopy and deep learning**
Berghian-Grosan C., IŞIK Ş., Porav A. S., DAĞ İ., Ay K. O., Vithoukas G.
Journal of Molecular Liquids, vol.401, 2024 (SCI-Expanded)
- II. **Fabric defects identification for textile industry with a deep learning approach**
Guder O., Işık Ş., Anagün Y.
Journal of the Textile Institute, 2024 (SCI-Expanded)
- III. **Predicting compressor mass flow rate using various machine learning approaches**
Yazar I., Anagün Y., Işık Ş.
International Journal of Turbo and Jet Engines, 2024 (SCI-Expanded)
- IV. **Predicting Soil Quality Index with a Deep Regression Approach**
Işık Ş., Turgut B., Anagün Y., Olgun M.
COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS, vol.55, pp.1313-1323, 2024 (SCI-Expanded)
- V. **Predicting soil EC using spectroscopy and smartphone-based digital images**
GÖZÜKARA G., ANAGÜN Y., IŞIK Ş., Zhang Y., Hartemink A. E.
CATENA, vol.231, 2023 (SCI-Expanded)
- VI. **Surface roughness classification of electro discharge machined surfaces with deep ensemble learning**
ANAGÜN Y., IŞIK Ş., Hayati Çakir F. H.
Measurement: Journal of the International Measurement Confederation, vol.215, 2023 (SCI-Expanded)
- VII. **Evaluation of EfficientNet models for COVID-19 detection using lung parenchyma**
Kurt Z., IŞIK Ş., KAYA Z., ANAGÜN Y., Koca N., Çiçek S.
Neural Computing and Applications, vol.35, no.16, pp.12121-12132, 2023 (SCI-Expanded)
- VIII. **The classification of wheat species based on deep convolutional neural networks using scanning electron microscope (SEM) imaging**
Anagün Y., Işık Ş., Olgun M., Sezer O., Basciftci Z., Arpacioğlu N. G. A.
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.249, no.4, pp.1023-1034, 2023 (SCI-Expanded)
- IX. **DEEP LEARNING-BASED CUSTOMER COMPLAINT MANAGEMENT**
Anagün Y., Bolel N. S., Işık Ş., Ozkan S. E.
JOURNAL OF ORGANIZATIONAL COMPUTING AND ELECTRONIC COMMERCE, vol.32, no.3-4, pp.217-231, 2022 (SCI-Expanded)
- X. **Consensus rule for wheat cultivar classification on VL, VNIR and SWIR imaging**
IŞIK Ş., ÖZKAN K., Demirez D. Z., SEKE E.
IET Image Processing, vol.16, no.11, pp.2834-2844, 2022 (SCI-Expanded)

- XI. **Overview of handcrafted features and deep learning models for leaf recognition**
IŞIK Ş., ÖZKAN K.
JOURNAL OF ENGINEERING RESEARCH, vol.9, no.1, 2021 (SCI-Expanded)
- XII. **Face Recognition by Using 2D Orthogonal Subspace Projections**
ERGİN S., IŞIK Ş., GÜLMEZOĞLU M. B.
TRAITEMENT DU SIGNAL, vol.38, no.1, pp.51-60, 2021 (SCI-Expanded)
- XIII. **Dominant point detection based on suboptimal feature selection methods**
IŞIK Ş.
EXPERT SYSTEMS WITH APPLICATIONS, vol.161, 2020 (SCI-Expanded)
- XIV. **CVABS: moving object segmentation with common vector approach for videos**
IŞIK Ş., ÖZKAN K., Gerek O. N.
IET COMPUTER VISION, vol.13, no.8, pp.719-729, 2019 (SCI-Expanded)
- XV. **A heating value estimation of refuse derived fuel using the genetic programming model**
ÖZKAN K., IŞIK Ş., Gunkaya Z., Ozkan A., Banar M.
WASTE MANAGEMENT, vol.100, pp.327-335, 2019 (SCI-Expanded)
- XVI. **Identification of wheat kernels by fusion of RGB, SWIR, and VNIR samples**
ÖZKAN K., IŞIK Ş., Yavuz B. T.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.99, no.11, pp.4977-4984, 2019 (SCI-Expanded)
- XVII. **SRLibrary: Comparing different loss functions for super-resolution over various convolutional architectures**
ANAGÜN Y., IŞIK Ş., SEKE E.
JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION, vol.61, pp.178-187, 2019 (SCI-Expanded)
- XVIII. **Common matrix approach-based multispectral image fusion and its application to edge detection**
IŞIK Ş., ÖZKAN K.
JOURNAL OF APPLIED REMOTE SENSING, vol.13, no.1, 2019 (SCI-Expanded)
- XIX. **Biometric person authentication framework using polynomial curve fitting-based ECG feature extraction**
Isik Ş., Ozkan K., ERGİN S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.5, pp.3682-3698, 2019 (SCI-Expanded)
- XX. **SWCD: a sliding window and self-regulated learning-based background updating method for change detection in videos**
IŞIK Ş., ÖZKAN K., GÜNAL S., GEREK Ö. N.
JOURNAL OF ELECTRONIC IMAGING, vol.27, no.2, 2018 (SCI-Expanded)
- XXI. **Wheat grain classification by using dense SIFT features with SVM classifier**
OLGUN M., Onarcan A. O., Ozkan K., Isik Ş., SEZER O., ÖZGİŞİ K., AYTER ARPACIOĞLU N. G., BUDAK BAŞÇİFTÇİ Z., ARDIÇ M., KOYUNCU O.
COMPUTERS AND ELECTRONICS IN AGRICULTURE, pp.185-190, 2016 (SCI-Expanded)
- XXII. **A new approach for edge detection in noisy images based on the LPGPCA technique**
IŞIK Ş., ÖZKAN K.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.4, pp.2789-2805, 2016 (SCI-Expanded)
- XXIII. **A novel multi-scale and multi-expert edge detector based on common vector approach**
ÖZKAN K., IŞIK Ş.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.69, no.9, pp.1272-1281, 2015 (SCI-Expanded)
- XXIV. **A new classification scheme of plastic wastes based upon recycling labels**
ÖZKAN K., ERGİN S., IŞIK Ş., Isikli I.
WASTE MANAGEMENT, vol.35, pp.29-35, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Diagnosing Diseases from Fingernail Images**
CAN Z., IŞIK Ş.
Eskişehir Osmangazi Üniversitesi mühendislik ve mimarlık fakültesi dergisi (online), vol.30, no.3, pp.464-470, 2022 (Peer-Reviewed Journal)
- II. **Using deep learning approaches for coloring silicone maxillofacial prostheses: A comparison of two approaches**
KURT M., KURT Z., IŞIK Ş.
JOURNAL OF INDIAN PROSTHODONTIST SOCIETY, vol.23, no.1, pp.84-89, 2022 (ESCI)
- III. **Nesnelerin İnterneti Güvenliği: Ev Ağı Güvenlik İncelemesi Ve Değerlendirmesi**
Kandır M. O., Yolaçan E. N., Işık Ş.
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.27, no.2, pp.803-816, 2022 (Peer-Reviewed Journal)
- IV. **A Deep Learning Based Sleepness And Wakefulness Detection for Drivers**
IŞIK Ş., ANAGÜN Y.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.29, no.3, pp.311-315, 2021 (Peer-Reviewed Journal)
- V. **Contribution Analysis of Optimization Methods on Super-Resolution**
ANAGÜN Y., IŞIK Ş.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.21, no.6, pp.1343-1352, 2021 (Peer-Reviewed Journal)
- VI. **Comparison of Different Modeling Methods For Prediction Of Palladium Adsorption onto Waste Orange Pee**
ÖZKAN A., IŞIK Ş., GÜNKAYA Z., ÖZKAN K., BANAR M.
Mühendislik Bilimleri ve Tasarım Dergisi, vol.9, no.3, pp.758-767, 2021 (Peer-Reviewed Journal)
- VII. **Güvenlik Sistemleri için Silah ve Bıçak Tanıma**
IŞIK Ş., ÖZKAN Ş. E., KURT Z.
Afyon Kocatepe University Journal of Sciences and Engineering, vol.21, pp.565-569, 2021 (Peer-Reviewed Journal)
- VIII. **Wheat kernels classification using visible-near infrared camera based on deep learning**
ÖZKAN K., SEKE E., IŞIK Ş.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.27, no.5, pp.618-626, 2021 (ESCI)
- IX. **EVALUATION OF DIFFERENT CURVE FITTING MODELS FOR PREDICTION OF MUNICIPAL SOLID WASTE COMPOSITION**
ÖZKAN A., ÖZKAN K., IŞIK Ş., BANAR M.
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.27, pp.385-393, 2021 (ESCI)
- X. **Spam E-mail Classification Recurrent Neural Networks for Spam E-mail Classification on an Agglutinative Language**
IŞIK Ş., KURT Z., ANAGÜN Y., ÖZKAN K.
International Journal of Intelligent Systems and Applications in Engineering, vol.8, no.4, pp.221-227, 2020 (Scopus)
- XI. **REAL TIME PEDESTRIAN ALERT SYSTEM FOR VEHICLES**
IŞIK Ş., VATANSEVER G., ANAGÜN Y., ÇELİKHAN M., ÖZKAN K.
Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, vol.21, no.3, pp.446-453, 2020 (Peer-Reviewed Journal)
- XII. **Common Vector Approach Based Image Gradients Computation for Edge Detection**
IŞIK Ş., ÖZKAN K.
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), vol.11989, pp.408, 2020 (Peer-Reviewed Journal)
- XIII. **A new subspace based solution to background modelling and change detection**
IŞIK Ş., ÖZKAN K., GEREK Ö. N., DOĞAN M.
International Journal of Intelligent Systems and Applications in Engineering, vol.2016, no.4, pp.82-86, 2016 (Peer-

Reviewed Journal)

XIV. A Note on Background Subtraction by Utilizing a New Tensor Approach

IŞIK Ş., ÖZKAN K., GEREK Ö. N.

International Journal of Intelligent Systems and Applications in Engineering, vol.2016, no.4, pp.87-91, 2016 (Peer-Reviewed Journal)

XV. The Principal Component Analysis Method Based Descriptor for Visual Object Classification

KURT Z., ÖZKAN K., IŞIK Ş.

International Journal of Intelligent Systems and Applications in Engineering, vol.3, no.3, pp.97, 2015 (Peer-Reviewed Journal)

XVI. A Comparative Evaluation of Well known Feature Detectors and Descriptors

IŞIK Ş., ÖZKAN K.

International Journal of Applied Mathematics, Electronics and Computers, vol.3, no.1, pp.1, 2015 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

I. Computer-Aided Embryo Quality Determination In Vitro Fertilization (IVF) Treatment

ANAGÜN Y., IŞIK Ş.

16th International Congress on Quality in Healthcare, Accreditation and Patient Safety, Antalya, Turkey, 22 May 2022, pp.74

II. Hafif Evrimsel Sinir Ağı İle Tırnak Hastalığı Sınıflandırması

IŞIK Ş., CAN Z., ANAGÜN Y., GÜDER O.

16. Uluslararası Sağlıkta Kalite, Akreditasyon Ve Hasta Güvenliği Kongresi, Antalya, Turkey, 22 - 25 May 2022

III. Artificial Intelligence Based Brain Tumor Diagnosis System

ANAGÜN Y., IŞIK Ş.

Mediterranean International Conference on Research in Applied Sciences, Antalya, Turkey, 22 April 2022, pp.5-6

IV. Deep Neural Network Framework for Automatic Brain Tumor Segmentation Using Magnetic Resonance Images

ANAGÜN Y., IŞIK Ş.

Mediterranean International Conference on Research in Applied Sciences, Antalya, Turkey, 22 April 2022, pp.3-4

V. Deep Learning-Based COVID-19 Detection Using Lung Parenchyma CT Scans

Kaya Z., Kurt Z., IŞIK Ş., Koca N., Çiçek S.

International Conference on Computing and Communication Networks, ICCCN 2021, Virtual, Online, 19 - 20 November 2021, vol.394, pp.261-275

VI. Common Vector Approach Based Image Gradients Computation for Edge Detection

IŞIK Ş., ÖZKAN K.

Mathematical Aspects of computer and Information Sciences, İstanbul, Turkey, 13 - 15 November 2019, vol.1

VII. Shallow and Deep Convolutional NeuralNetwork Models for Classification of VNIRWheat Samples

ÖZKAN K., IŞIK Ş., YAVUZ B.

5th INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES, Prague, Czech Republic, 12 - 16 June 2019, pp.363-368

VIII. Atık Portakal Kabuklarıyla Altın Adsorpsiyonunun Regresyon Analizi

ÖZKAN K., IŞIK Ş., ÖZKAN A., GÜNKAYA Z., BANAR M.

UKSAY, 25 - 27 October 2018

IX. Regression Analysis of the Gold Adsorption by Waste Orange Peels

ÖZKAN K., IŞIK Ş., ÖZKAN A., GÜNKAYA Z., BANAR M.

International Symposium on Urban Water and Wastewater Management, 25 - 27 October 2018

X. Use of image analysis methods to determine the chlorine content of refuse derived fuel

ÖZKAN A., ÖZKAN K., IŞIK Ş., GÜNKAYA Z., BANAR M.

29th European Conference on Operational Research (EURO2018), Valencia, Spain, 11 July 2018, pp.150

- XI. **Evaluation of Convolutional Neural Network Features for Malware Detection**
ÖZKAN K., IŞIK Ş., Kartal Y.
6th International Symposium on Digital Forensic and Security (ISDFS), Antalya, Turkey, 22 - 25 March 2018,
pp.404-407
- XII. **Using Movie Posters for Prediction of Box-Office Revenue with Deep Learning Approach**
ÖZKAN K., Atak O. N., IŞIK Ş.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XIII. **MULTISPECTRAL IMAGE FUSION USING A NEW TENSOR APPROACH**
IŞIK Ş., ÖZKAN K., DORDINEJAD G.
International Conference on Advanced Technology Sciences, 9 - 12 May 2017
- XIV. **Prediction of Heating Values of Refuse Derived Fuel from Proximate Analysis Data**
ÖZKAN K., IŞIK Ş., ÖZKAN A., GÜNKAYA Z., BANAR M.
5th International Conference on Advanced Technology Sciences, 9 - 12 May 2017, pp.212-216
- XV. **ImageHawk Search Engine: Content Based Image Retrieval System**
ÇEVİKALP H., IŞIK Ş.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XVI. **Quality Measurement of Fruits and Vegetables with Near Infrared Camera**
Turker D., Sezer R., IŞIK Ş., ÖZKAN K.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XVII. **A note on background subtraction by utilizing a new tensor approach**
IŞIK Ş., ÖZKAN K., DOĞAN M., GEREK Ö. N.
3rd International Conference on Advanced Technology & Sciences (ICAT'16), 1 - 03 September 2016, pp.1497-1502
- XVIII. **A NEW SUBSPACE BASED SOLUTION TO BACKGROUND MODELLING AND CHANGE DETECTION**
IŞIK Ş., ÖZKAN K., DOĞAN M., GEREK Ö. N.
3rd International Conference on Advanced Technology & Sciences, 1 - 03 September 2016
- XIX. **curve fitting modelling for the estimation of silver absorption into biosorbent**
ÖZKAN K., ÖZKAN A., IŞIK Ş., ÇOKAYGİL Z., BANAR M.
SYMPOSIUM ON EUROASIAN BIODIVERSITY, 23 - 27 May 2016
- XX. **Multispectral Image Fusion Based on the Common Vector Approach**
ÖZKAN K., IŞIK Ş., Dordinejad G.
International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Sinaia, Romania, 2 - 05 August 2016
- XXI. **A new Approach for Speech Denoising**
ÖZKAN K., SEKE E., IŞIK Ş.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016,
pp.2109-2112
- XXII. **Comparison of Different Modeling Methods of Copper Adsorption by Modified Orange Peels**
Ozkan A., Ozkan K., Isik Ş., Gunkaya Z., Banar M.
16th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP) / International Symposium on Computer Applications (CAMI), İstanbul, Turkey, 5 - 07 October 2016
- XXIII. **Spam e mail classification using a new term weighting approach for an agglutinative language**
IŞIK Ş., ÖZKAN K., KURT Z.
INTERNATIONAL CONFERENCE ON TECHNOLOGY AND SCIENCES (ICAT'15), Antalya, Turkey, 4 - 07 August 2015,
pp.34-39
- XXIV. **Prediction for the Solid Waste Composition by use of Different Curve Fitting Models: A Case Study**
ÖZKAN K., IŞIK Ş., ÖZKAN A., BANAR M.
International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2015), Madrid, Spain, 2 - 04 September 2015, pp.173-178
- XXV. **Weighted Principal Component Analysis Based Edge Linking**
ÖZKAN K., IŞIK Ş.

International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2015), Madrid, Spain, 2 - 04 September 2015, pp.70-76

XXVI. Edge Linking Using Angle Information

IŞIK Ş., ÖZKAN K.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.423-426

XXVII. The Principal Component Analysis Method Based Descriptor for Visual Object Classification

KURT Z., ÖZKAN K., IŞIK Ş.

International Conference on Advanced Technology & Sciences (ICAT' 14), Antalya, Turkey, 12 - 15 August 2014, pp.33-37

XXVIII. A Comparative Evaluation of Well known Feature Detectors and Descriptors

IŞIK Ş., ÖZKAN K.

INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGY AND SCIENCES (ICAT'xx14), 12 - 15 August 2014, pp.26-32

XXIX. The Assessment of Feature Selection Methods on Agglutinative Language for Spam Email Detection: A Special Case for Turkish

ERGİN S., IŞIK Ş.

IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Alberobello, Italy, 23 - 25 June 2014, pp.122-125

XXX. The Investigation on the Effect of Feature Vector Dimension for Spam Email Detection with a New Framework

ERGİN S., IŞIK Ş.

9th Iberian Conference on Information Systems and Technologies (CISTI), Barcelona, Spain, 18 - 21 June 2014

XXXI. A NOVEL MULTI-SCALE AND MULTI-EXPERT EDGE DETECTION METHOD BASED ON COMMON VECTOR APPROACH

IŞIK Ş., ÖZKAN K.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1630-1633

Metrics

Publication: 72

Citation (WoS): 248

Citation (Scopus): 434

H-Index (WoS): 7

H-Index (Scopus): 10